

THE SPECIE PRODUCING AREA OF NORTH AMERICA.

Subdivisions Showing the Gold and Silver Area Owned by the Great Commercial Powers of the World.

territory was reduced 897,550 miles, and by the second, 26,185 miles—leaving the precise balance seven hundred and sixty-six thousand four hundred and eighty-two square miles. The precious metals are found in nearly every part of the country. In nearly every State mines are now or have been worked. In some portions mining absorbs the entire energies of the people; in the others manufactures and agriculture receive some attention. This was the condition at the time of the assumption of the empire by Maximilian. By the subsequent cession of the Northern States to Louis Napoleon, the arrangement as set forth in the following table holds as present:

Maximilian.	Area Square Miles.	Population.
Agua Calientes.....	2,947	61,243
Colima.....	18,031	181,914
Guerrero.....	14,035	229,435
Jalisco.....	30,928	270,000
Michoacan.....	46,945	804,058
Mexico.....	22,220	491,679
Mexico.....	18,861	1,012,554
Oaxaca.....	34,942	551,962
Puebla.....	8,581	655,622
Queretaro.....	1,520	180,000
San Luis Potosi.....	27,194	390,800
Tlaxcala.....	19,096	75,901
Veracruz.....	1,918	80,171
Yucatan.....	26,488	338,500
Zacatecas.....	47,253	680,325
Zacatecas.....	20,233	302,141
District of Mexico.....	87	500,000
Total.....	358,947	7,529,616

The increase in population since the above calculation was made—eight years since—is estimated at the rate of 144,000 per annum, which will give a population rising nine millions at this time.

By the above table it will be seen that Louis Napoleon has the larger area of metalliferous territory, but which is comparatively little populated. Maximilian retains the smaller area with a denser population. Napoleon's plan is to fill up his territory with emigrants of his own choosing, while Maximilian takes care of the mass of the population of Mexico. Napoleon's territory has a frontage on the two shores of the Gulf of California and the external ocean, being a greater sea front than that of Maximilian on both the Atlantic and Pacific. Napoleon's frontage on the Atlantic or Gulf of Mexico, lies along the coast of the State of Tampico, which is a front of the greatest importance in consequence of the transit across the Atlantic, and embraces the traverse line from Tampico and Matamoros, by way of Monterey, Saltillo and Chihuahua, to Guaymas on the Pacific.

THE NAPOLEONIC PROGRAMME.
It being a part of the Napoleonic programme, to compensate Maximilian for the cession of so important a portion of his metalliferous realm, to annex to the Mexican empire a part of Central America, we append a table showing the area and population of those Central American States likely to be so transferred. It will be remembered that Maximilian has, by proclamation, annexed the State of Honduras, in Central America, to his imperial dominions.

Area and Population of the States of Central America.	Area in sq. miles.	Population.
Guatemala.....	43,380	971,450
San Salvador.....	9,000	394,000
Honduras.....	32,000	255,000
Nicaragua.....	40,000	257,000
Costa Rica.....	21,500	215,000
Total.....	154,880	2,195,450

The above territory is outside of the metalliferous mountain system of North America, as above defined. We refer to it here merely for the purpose of showing the amount of territory Maximilian is likely to absorb if the original Napoleonic programme in regard to the American continent is allowed by the government of the United States to be consummated.

TOTAL AMOUNT OF PRECIOUS METALS PRODUCED BY MEXICO.

The total amount of precious metals produced by the mines of Mexico since the period of the conquest, 1521, to the present day, 1865—three hundred and forty-six years—is estimated at six thousand millions, or an average of nearly twenty millions per annum. This includes the amount registered as exported, the amount illicitly carried away, and the amount retained for home consumption. The total amount exported for 1863, as we have seen, was twenty-five millions, but that for 1864 was only eighteen millions and a half.

RICHNESS OF NAPOLEON'S AREA.
The area retained by Maximilian in the late partition of the Mexican territory is that portion which has heretofore furnished the bulk of the production of the precious metals. The area assigned to Napoleon is capable of a still greater development and production. The gold and silver mines in Sonora, Sinaloa, Durango, Chihuahua, and Nueva Leon are about equally diffused over each State—mines being located at the special mining points in each.

WHAT MAY BE EXPECTED IN MEXICO.
It is reasonable to expect in Mexico from the Germanic people, and from the French and Italian, an infusion of the energies of production parallel to that which we have formerly seen characterize the Spaniards, and more lately the Americans in California, and the British in Australia, in developing newly acquired gold bearing countries. If such should be the case, we may expect to see, within a few years, the Mexican territory of Louis Napoleon equalling in production the former entire gold and silver producing area of Mexico.

GOLD BEARING TERRITORY IN BRITISH AMERICA.
North of the forty-ninth degree of latitude the British territories in North America rest upon the Pacific Ocean, having a coast line of seven hundred and fifty miles, together with the great islands of Vancouver and Queen Charlotte. The gold bearing area which lies here immediately adjacent to the coast may be estimated at two hundred thousand square miles, or three times the area of England and Scotland. The aggregate production of gold from this area probably equals seven and a half millions, derived principally from the regions drained by Fraser river.

GOLD BEARING TERRITORY IN RUSSIAN AMERICA.
Russia occupies the territory filling out the continental interval to Behring's Strait, comprising an area of three hundred thousand square miles, with a coast line of twelve hundred miles upon the Pacific and the Arctic seas. The search for gold over this area has been limited to the ascertainment of its existence. The energies of production have not yet established themselves to any notable extent.

THE GOLD BEARING AREA OF THE UNITED STATES.
For convenience we will classify the gold bearing area of the United States—the million, five hundred thousand square miles—in tiers of States and Territories, thus:—
First Tier.—California, Oregon and Washington, on the sea front of the Pacific, with a coast line of one thousand five hundred miles.
Second Tier.—East of the above, Nevada and Idaho.
Third Tier.—East of these, Arizona, Utah and Montana.

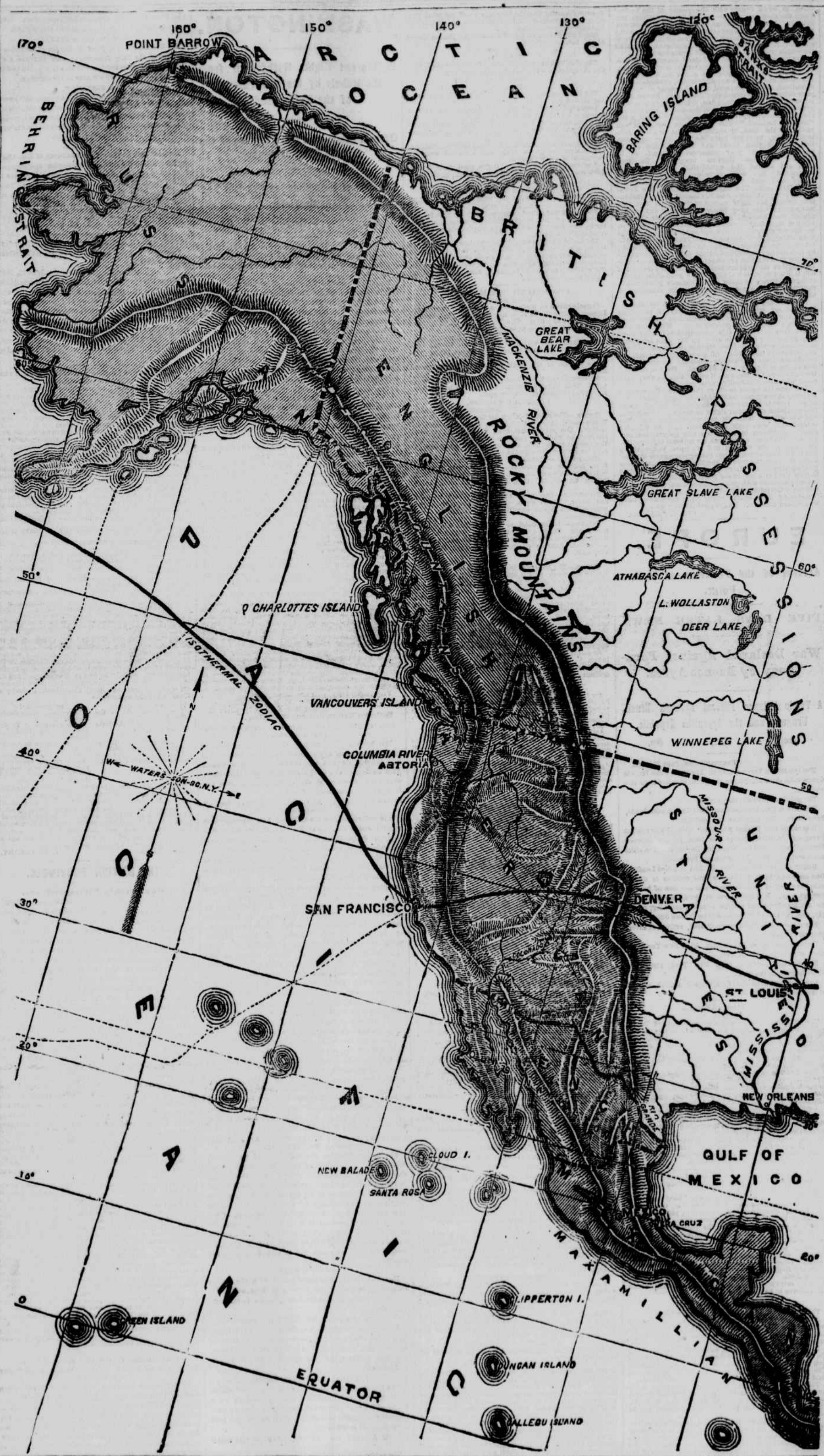
FOURTH TIER.—And East of these again, New Mexico, Colorado, Nebraska and Dakota.
Fifth Tier.—Utah and Montana lie longitudinally along the middle of the great Plateau. The other tiers lie upon the two Cordilleras and their outside flanks.
The first tier—California, Oregon and Washington—border the whole length of the Cordillera of the Sierra Nevada, including its slope to the Pacific sea. This tier has its outlet by the Columbia river into the Pacific, and the Colorado river into the Gulf of California. The city of San Francisco is the focal point of business activity for this tier.
The second and third tiers—Nevada, Idaho, Utah and Montana—cover the area of the Plateau, lie on a comparatively level level, inside the two Cordilleras, having no important slope in either direction.
The fourth tier—New Mexico, Colorado, Nebraska and Dakota—border the great Cordillera of the Sierra Madre and its eastern slope to the Great Plains, whence the rivers descend to the Mississippi. This whole east front connects uninterruptedly, across the basin of the Mississippi, to the city of New York, which presents itself as the convenient focus to which all lines of transit from this direction naturally converge.

AURIFEROUS AREA CONVERGING TO THE PACIFIC ON SAN FRANCISCO.

The average energies of production on the western side of the continent, we say, their converging point at San Francisco. This region may be estimated to contain an auriferous area of about five hundred and fifty thousand square miles, or reduced to score, distributed as follows:

First Tier.	Area.
California.....	120,947,480
Oregon.....	50,973,290
Washington.....	38,401,100
Total.....	210,321,869
Second Tier.	Area.
Nevada.....	14,000,000
Idaho.....	62,075,000
Total.....	76,075,000
Third Tier.	Area.
Arizona.....	117,316,888
Utah.....	231,324,968
Grand total.....	524,727,665

The population of this division may be estimated at one million and a quarter. Nevada and Idaho must be regarded as immediately adjacent with and dependent upon the Pacific front, and as accessory to San Francisco. The first lodgment in this wilderness was made in 1848, and it has had its origin and creation within the space of sixteen years.



FORMS OF TRANSPORTATION WEST.

The forms of transportation within this area at present consist of ordinary roads, navigable rivers and the sea.

PRECIOUS METALS PRODUCED, EXPORTED, ETC., WITHIN FIFTEEN YEARS.

The aggregate amount of precious metals produced within the area above mentioned during the past fifteen years, is roughly estimated at one thousand, seven hundred and fifty millions; of which one thousand, two hundred and fifty millions were exported to distant countries, domestic and foreign, and five hundred millions retained for home employment, the laying out of cities and towns, the construction of public buildings, and public improvements generally. This estimate, of course, includes the amount of precious metals carried off in the hands of passengers, and through other channels not covered in the official reports of the amount exported.

In this estimate, it will be remarked that we have confined our calculations to the amount produced on the Pacific coast and the region sloping toward it, and not including the amount produced by the auriferous mountains to the eastward, the Sierra Madre, a portion of the great Plateau, and all the territory sloping toward the Mississippi basin. Nor have we embraced the amount produced in the more eastern or southern states; the State of Georgia, for instance, where the Danubian river flows toward the Atlantic.

AURIFEROUS AREA CONVERGING TO THE ATLANTIC ON THE CITY OF NEW YORK.

The third and fourth tiers of these longitudinal gold bearing regions, viz—Arizona, Utah and Montana, and New Mexico, Colorado, Nebraska and Dakota, have a superficial expanse of something near one million square miles, or in acres, as a rough estimate, distributed as follows:

Third Tier.	Area.
Arizona.....	78,560,000
Utah.....	68,395,500
Montana.....	63,368,704
Total.....	210,324,204
Fourth Tier.	Area.
New Mexico.....	77,008,540
Colorado.....	67,125,000
Nebraska.....	68,253,000
Dakota.....	62,526,000
Total.....	274,912,540
Grand total.....	Area.
	485,236,744

From this estimate may be excluded portions of Colorado, Nebraska and Dakota, extending out to the great plains, and protruding beyond the active gold producing region proper.

THE GOLD PRODUCING AREA HAS ITS FOCUS OF CONVERGENCE AT NEW YORK CITY.

All the commerce of New Mexico, Colorado, Utah, Montana, Nebraska and Dakota, and the bulk of that of Arizona, radiates to and from the city of New York.

FORMS OF TRANSPORTATION EAST.

The forms of transportation within this region traverse the whole area of the United States, and of all the States. They embrace the ordinary roads, the admirable natural roads of the Great Plains, navigable rivers and the entire system of railroads in North America—existing and prospective—passing and repassing through and through a territory occupied by thirty millions of people.

AGGREGATE PRODUCTION OF PRECIOUS METALS IN THE ABOVE REGION WITHIN FIVE YEARS.

The aggregate amount of precious metals produced within the area of the third and fourth tiers has been one hundred and twenty-five millions of dollars. This has been produced within the space of five years—so recent is the date of their discovery and development by the pioneer people, who have had but rude and imperfect means of working the mines, and are, even as yet, without the assistance of proper machinery to develop the treasures whose locality they have discovered.

TOTAL PRODUCTION FOR ALL THE TIERS.

The following will represent the aggregate amount of precious metals mined in the above gold bearing tiers since the first discovery in 1848 and 1849:

PRECIOUS METALS MINED IN THE ABOVE GOLD BEARING TIERS SINCE THE FIRST DISCOVERY IN 1848 AND 1849:

First and second tiers.....	\$1,750,000,000
Third and fourth tiers.....	125,000,000
Total.....	\$1,875,000,000

And it is safe to estimate that within the next two years the aggregate production of the precious metals within the territory above named will reach the round sum of two hundred millions of dollars. This will assuredly be the case now the war has ceased, and half a million hardy and adventurous soldiers, accustomed to the rigors and deprivations of frontier life, are ready to swell the stream of emigration already pouring into the newly discovered gold and silver regions.

MAGNITUDE OF THE AURIFEROUS REGIONS OF THE THIRD AND FOURTH TIERS.

The magnitude and auriferous character of the mountains embraced in the third and fourth or Eastern tiers surpasses that of the extreme West or Pacific side. The few years of imperfect development demonstrate this fact. This region presents itself as an immediate contact with the life of American people and foreign immigrants advancing upon its whole front, pressed onward by the whole weight of the Eastern population and the strength of their forces. Such are the extent and natural resources of this Eastern front, that they are capable of rapid expansion, limited only

by the demand which may exist and the factory and capital which may elect this wonderful and prolific field for practical and profitable investment.
This source of the production of the precious metals, lying within and associated with the prevailing organized system of national commerce and industry, is immediately available to meet the present extraordinary demands upon the national credit; and those consequent upon protracted war and prospective expansion of empire. It must be remembered that this view is taken exclusively to the Eastern slope of our auriferous mountain regions, described as having its natural concentric point at and dependent upon the city of New York.

THE PUBLIC DEBT AND A WAY TO PAY IT.
The public debt of the loyal States on the 24th October last, with interest for the current year added, amounted to two thousand two hundred and sixty millions of dollars. The interest on this sum that is payable in coin amounts to about fifty-six and a half millions, and it requires one territory alone—Colorado—to duplicate this present production, in order to furnish bullion sufficient to cover this amount. This startling, but indisputable fact must tend to allay any anxiety that may exist in the minds of our people as regards the ability of the government to maintain its credit in the face of almost any expenditure that may be required to render it strong and enduring.

Incidental to this startling and gigantic expansion, bearing upon the domestic system and home relations of the American people, comes the additional and attractive prospect that these movements are rapidly opening the trail and hastening the advance of our people to the grand arena of the Pacific Ocean, its commerce, its navigation and its population.
Beside this, and the excellent economy of arrangement discernible in this Eastern system of auriferous mountains, we are struck at beholding the fact that the precious metals, as the source from which the bulk of the needs of industry there, is departing from the seaboard, permeate and irrigate, as it were, the whole family of the American people, vitalizing every field of enterprise and industry, and stimulating the populations inhabiting the entire Eastern geographical expanse. If the precious metals arriving from this direction eventually find their way outward to foreign countries, they do not so vitally these infinite benefits to our domestic industrial system have been permanently secured.

On this arena are assembled magnitude of plan, economy of distribution, universal accessibility and ease of transportation, infinite variety of detail, in harmony with the populations and popular energies which they are calculated to arouse and to employ.

SUB-DIVISIONS OF THE GOLD BEARING AREA OF NORTH AMERICA AMONG THE COMMERCIAL POWERS.

The following table will present at a glance a summary of the above, and show the sub-divisions of the gold bearing area of North America among the commercial powers:

Area square miles.	Population.
German America (Maximilian).....	358,947 7,529,616
French America (Napoleon III.).....	405,273 953,616
American America (United States).....	1,250,000 1,250,000
British America (Queen Victoria).....	200,000 61,000
Russian America (Alexander II.).....	300,000 27,000
Total.....	2,513,940 9,821,332

TOTAL AND AVERAGE ANNUAL PRODUCTIONS OF THE GOLD BEARING AREA IN NORTH AMERICA.

Area square miles.	Average annual production.	Total.
United States and Territories.....	\$10,250,000	\$60,000,000
Mexico (34d years).....	100,000,000	1,875,000,000
British America.....	2,500,000	7,000,000
Russian America.....	(Undeveloped.)	

GENERAL CONCLUSIONS.

From the above exhibit may be obtained a comprehensive view of the general attention given by commercial nations to the development of the precious metals on this continent, as the source from which the bulk of the supply is to be derived in the future. This has already resulted in an attempt to partition out largely among the European Powers all the gold bearing area of North America and positively embraced within the sovereignty of the Union. Although the greatness of area and the advantage of position held by the United States give to her the undoubted supremacy should this productive system become permanent, we are urged to increased energy in the development of our own area, augmented by the rivalry incidental to the approximation of so many foreign nations. The rapid growth in volume of the commerce of the Pacific ocean is perpetually exacting a corresponding increase in the specie basis of the whole field of commerce. The area which develops itself within the domestic control of the American people, to meet this indefinite expansion, is amply sufficient to sustain their largest ambitions and to meet the horizon to which their stimulative energies may urge them on. The universal popularity among the American people of non-interference in the domestic affairs of the New World warns us to regard with increased vigilance the political maxims laid down by Monroe, and reemphasized by every sound statesman of America, North and South.

COAL AS A SOURCE OF NATIONAL WEALTH.

In the above review of the extent and importance of the gold and silver producing area of the United States we have presented only a single department embraced in the vast mineral resources of our country. Placing out of view altogether for the present these heavy productions in iron, lead, copper, zinc, tin, quicksilver, &c., which help to swell the national mineral wealth, we will proceed at once to show the enormous expanse and value of the coal beds of the Union, as furnished upon reliable data, and as compared with those of European countries.

GREAT BRITAIN ALARMED AT THE PROSPECTIVE EXHAUSTION OF HER COAL FIELDS.

Some of the most scientific men in Great Britain—particularly Mr. Edward Bull, who in a paper published in the Quarterly Review of Science, about a year since, furnished some extremely valuable information on the "Coal Resources of Great Britain"—have thrown the thinking people of that country into a state of considerable agitation on account of the prospect of the exhaustion of their coal fields. It is estimated that one hundred millions of tons of coal are annually drawn from the British mines and consumed; and that, at this rate, the supply will last, some philosophers say, two hundred and forty years, others one thousand years. The Edinburgh Review is seriously exercised on the subject, and refers to the period when "the coal beds of England will be known only as a part of its past history." It mentions, however, that in its calculations it "has not spoken of the three great North American coal fields, reading European kingdoms in error, as if vast deposits have yet been made of very partially broken in upon by the hand of man."

Sir William Armstrong, in a late address to the British Association, expresses it "upon the British people and government to look to it that no needless and unwelcome waste of a source of wealth, and power, and happiness, so precious and so far from inexhaustible, should be imprudently permitted to continue."

Professor Henry D. Rogers, of the University of Glasgow, maintains that "the total supply of coal beneath the soil of Great Britain, at the present rate of growth of consumption, must become entirely spent or exhausted at the lapse of two hundred or three hundred years from this time."

THE COAL FIELDS OF THE UNITED STATES AS COMPARED WITH THOSE OF EUROPE.

Professor Rogers has placed in convenient form a variety of statistics in relation to the coal fields of Europe and the United States from which we glean a number of interesting facts. It appears that the United States, with its vast area of three millions of square miles, has one square mile of coal field to every fifteen square miles of territory; Great Britain has one to every thirty of surface; Belgium has one to every twenty-two and a half of surface. France one to every two hundred miles of surface.

Thus calculated—Belgium (assuming her coal fields to possess the high average thickness ascribed, of sixty feet of coal,) contains about thirty-six thousand millions tons of coal.

France, with the same thickness, fifty-nine thousand millions of tons.

The British Islands (adopting thirty-five feet as the average thickness) contain nearly one hundred and forty-two thousand five hundred millions. According to Mr. Hall's estimate the total supply is a little less than eighty thousand millions of tons.

Pennsylvania, computing her average of workable coal at twenty-five feet, has three hundred and sixteen thousand four hundred millions of tons.

Whole Appalachian coal field, adopting the same proportion, one billion, three hundred and eighty-seven thousand five hundred millions of tons.

Great middle coal field of the United States, in Indiana, Illinois, Michigan, Wisconsin, Minnesota and Western Kentucky, also with an average of twenty-five feet of coal, one billion, two hundred and seventy-seven thousand, five hundred millions of tons.

Great Western coal field in Iowa, Missouri, Kansas, Nebraska, Arkansas, Texas, Colorado, Utah, Idaho, Montana, Nevada, Arizona, California, Oregon, Washington and the Indian Territory, accepting ten feet as the mean thickness of the coal, nine hundred thousand millions of tons.

All the productive coal fields of North America, about four billions of tons.

COAL FIELDS OF THE UNITED STATES.

Area square miles.	Population.
Massachusetts.....	3,712
Rhode Island.....	11,880
Pennsylvania.....	12,000
Ohio.....	12,000
Maryland.....	12,000
Virginia.....	12,000
Kentucky.....	12,000
Tennessee.....	12,000
Alabama.....	12,000
Georgia.....	12,000
Indiana.....	12,000
Illinois.....	12,000
Michigan.....	12,000
Iowa.....	12,000
Missouri.....	12,000
Total.....	236,939

BRITISH PROVINCES.

Area square miles.	Population.
New Brunswick (pro- ductive).....	838
Pictou.....	350
Cumberland.....	200
Total.....	1,388

Great Britain..... 4,000 Bohemia..... 400 France..... 984 Saxony..... 30 Belgium..... 510 Spain..... 100 Sardinia..... 100 Westphalia..... 380

Total..... 7,004

The relative superficial magnitudes of the coal fields of the countries named will be recognized if we compare them by some simple unit of measure. Let this be one hundred square miles. In this case, Russia will be one hundred square miles, and so on.

Spain..... 2

Antarctic fields of Pennsylvania..... 4

Westphalia and Bohemia..... 5

Belgium..... 6

France..... 10

Rhenish Prussia..... 17

British Province of New Brunswick..... 75

Pennsylvania..... 120

Appalachian coal field..... 554

The entire coal field of United States..... 2,700